03500.103118.



### PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ın re Ap	oplication or:	)	
SHINICHI NAKAMURA		:	
Application No.: 10/566,166		:	Group Art Unit: 1614
• •	·	:	
3/1(0) 1	Date: January 27, 2006	;	
For:	CONJUGATED THIOPHENE	)	
	COMPOUND COMPRISING	:	•
	PERFLUORINATED AND	)	
	ALKYLATED SIDECHAINS,	:	
	CONDUCTIVE ORGANIC THIN	)	•
	FILM CONTAINING THE	:	
	COMPOUND, AND	)	
	FIELD-EFFECT TYPE ORGANIC	:	
	TRANSISTOR EMPLOYING	)	
	THE THIN FILM	:	March 21, 2007

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. Copies of the listed documents, other than the U.S. patent documents, are enclosed.

## The following documents are discussed at the following pages of the

# specification:

<u>Documents</u>	Page(s)
Japan 2003-221434, Japan 2003-261655, Japan 2003-268083, and Japan 2003-292588	2
H. Sirringhaus, et al., "Two-dimensional charge transport in self-organized, high-mobility conjugated polymers", Nature, Vol. 401, October 14, 1999, pp. 685-688.	12
Anna Bravo, et al., "New Methods of Free-Radical Perfluoroalkylation of Aromatics and Alkenes. Absolute Rate Constants and Partial Rate Factors for the Homolytic Aromatic Substitution by n-Perfluorobutyl Radical", Journal of Organic Chemistry, Vol. 62, No. 21, 1997, pp. 7128-7136.	22
J. Leroy, et al., "Copper-Mediated Perfluoroalkylation of Halogenothiophenes", Journal of Fluorine Chemistry, Vol. 27, No. 3, 1985, pp. 291-298.	22
Richard M. Kellogg, et al., "Acid-Catalyzed Brominations, Deuterations, Rearrangements, and Debrominations of Thiophenes under Mild Conditions", The Journal of Organic Chemistry, Vol. 33, No. 7, July 1968, pp. 2902-2909.	22
K. Tamao, et al., "Nickel-Phosphine Complex-Catalyzed Grignard Coupling-II", Tetrahedron, Vol. 38, No. 22, 1982, pp. 3347 to 3354.	22
Tsuyoshi Okamoto, et al., "Halogenation Using Quaternary Ammonium Polyhalides. XXXI Halogenation of Thiophene Derivatives with Benzyltrimethylammonium Polyhalides", Bulletin of the Chemical Society of Japan, Vol. 64, No. 8, 1991, pp. 2566-2568.	23
Chenggang Wang, et al., "Studies on Conjugated Polymers: Preparation, Spectroscopic, and Charge-Transport Properties of a New Soluble Polythiophene Derivative: Poly (3', 4'-dibutyl-2,2':5'2"-terthiophene)", Chem. Mater., Vol. 6, No. 4, 1994, pp. 401-411.	23
Tian-An Chen, et al., "Regiocontrolled Synthesis of Poly(3-alkylthiophenes) Mediated by Rieke Zinc: Their Characterization and Solid-State Properties", Journal of the American Chemical Society, Vol. 117, No. 1, 1995, pp. 233-244 with Supplemental pp. 1-14.	23

U.S. Patent No. 7,141,644 is believed to be in the same patent family as Japan

2003-221434, U.S. Patent No. 6,770,904 is believed to be in the same patent family as Japan

2003-261655, U.S. Patent No. 6,872,801 is believed to be in the same patent family as Japan

2003-268083, and U.S. Patent No. 6,949,762 is believed to be in the same patent family as

Japan 2003-292588.

This Information Disclosure Statement is being filed before the issuance of a

first Office Action on the merits. Therefore, no fee under 37 C.F.R. § 1.97(c)(2) is believed

due. Nevertheless, the Commissioner may charge Deposit Account No. 06-1205, should any

fee be due for filing this paper.

Applicant requests that the above information be considered by the Examiner

and that a copy of the enclosed Form PTO-1449 be initialed and returned indicating that such

information has been considered.

Applicant's undersigned attorney may be reached in our Costa Mesa,

California office at (714) 540-8700. All correspondence should continue to be directed to

our below-listed address.

Respectfully submitted,

Damond E. Wadnais

Attorney for Applicant

Registration No.: 52,310

FITZPATRICK, CELLA, HARPER & SCINTO

30 Rockefeller Plaza

New York, New York 10112-3800

Facsimile: (212) 218-2200

- 3 -

FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE PE  LIST OF REFERENCES CITED BY APPLICANT(S)  (Use several sheets if necessary)		ATTY DOCKET NO. 03500.103118.	APPLICATION NO. 10/566,166					
		APPLICANT SHINICHI NAKAMURA						
(Use several sheets if necessary)  MAR 2,2 1007			371(c) DATE January 27, 2	GROUP 1614				
	(All	Sea Sal	U.S. PATENT DOCUMENTS					
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
	7,141,644	11/28/06	Ong, et al.	528	373			
	6,949,762	09/27/05	Ong, et al.	257	40			
	6,936,186	08/30/05	lgawa, et al.	257	299.01			
	6,875,996	04/05/05	Nakamura	252	40			
	6,872,801	03/29/05	Ong, et al.	528	373			
	6,770,904	08/03/04	Ong, et al.	257	40			
	6,692,658	02/17/04	Nakamura, et al.	252	299.65			
	2007/0034861	02/15/07	Nakamura	257	40			
	2007/0034860	02/15/07	Nakamura	257	40			
		FO	REIGN PATENT DOCUMENTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT		
	2003-292588	10/15/03	Japan	· · ·		Abstract		
	2003-268083	09/25/03	Japan			Abstract		
	2003-261655	09/19/03	Japan	· .		Abstract		
	2003-221434	08/05/03	Japan			Abstract		
	0	THER DOCUMENT(S	) (Including Author, Title, Date, Pertinent	t Pages, Etc.)				
	Anna Bravo, et al., "New Methods of Free-Radical Perfluoroalkylation of Aromatics and Alkenes. Absolute Rate Constants and Partial Rate Factors for the Homolytic Aromatic Substitution by <i>n</i> -Perfluorobutyl Radical", Journal of Organic Chemistry, Vol. 62, No. 21, 1997, pp. 7128-7136.							
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	Richard M. Kellogg, et al., "Acid-Catalyzed Brominations, Deuterations, Rearrangements, and Debrominations of Thiophenes under Mild Conditions", The Journal of Organic Chemistry, Vol. 33, No. 7, July 1968, pp. 2902-2909.							
EYAMINED			DATE CONSIDERED					

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified)  U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)			ATTY DOCKET NO. APPLICATION NO. 10/566,166				
			APPLICANT SHINICHI NAKAMURA				
			371(c) DATE  January 27, 20	006	GROUP 1614		
	B	\$	U.S. PATENT DOCUMENTS				
*EXAMINER INITIAL	DOCUMENT NUMBER	TRADEMS DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
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		FC	REIGN PATENT DOCUMENTS				
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT	
		THER DOCLIMENT/S	() (Including Author, Title, Date, Pertinent	Pages Ftc I		<u></u>	
	J. Leroy, et al.,	"Copper-Med	liated Perfluoroalkylation		iophenes",	Journal of	
	Fluorine Chemistry, Vol. 27, No. 3, 1985, pp. 291-298.  Tsuyoshi Okamoto, et al., "Halogenation Using Quaternary Ammonium Polyhalides. XXXI Halogenation of Thiophene Derivatives with Benzyltrimethylammonium Polyhalides", Bulletin of the Chemical Society of Japan, Vol. 64, No. 8, 1991, pp. 2566-2568.						
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2 of 2